

Listing and Amendments to the Claims

This listing of claims will replace the claims that were published in the PCT Application and the International Preliminary Examination Report:

1 (currently amended) - VHF adapter for cable network, of the type comprising a first down conversion chain and a second up conversion chain, ~~characterized in that~~ wherein the first chain comprises a first mixer (406) followed by a second mixer (414) and the second chain a third mixer (416) followed by a fourth (412) and by a fifth mixer (408), and ~~in that~~ wherein all the local frequencies necessary for these five mixers are obtained from a very stable single reference oscillator (403).

2 (currently amended) - Adapter according to Claim 1, ~~characterized in that~~ wherein the single reference oscillator (403) drives a harmonics generator (404) inserted into a phase loop dielectric resonator oscillator (PLDRO) using an SPD system to obtain on the one hand after multiplication by two (405) a first local frequency energizing the first (406) and fifth (408) mixers, and on the other hand with a first very narrow filter (423) a second (414) local frequency for energizing the second and the third mixers (416).

3 (currently amended) - Adapter according to Claim 2, ~~characterized in that~~ wherein the single reference oscillator (403) furthermore drives an agile frequency synthesizer (410) controlled by a bus (411) so as to obtain variable frequencies for energizing the fourth mixer (412); and ~~in that~~ wherein a second very narrow filter (417) is placed between the output of the third mixer (416) and an input of the fourth mixer (412) so that, the intermediate frequency for energizing the third mixer (416) being a very low frequency pure frequency, the signal delivered by this third mixer (416) can be filtered by the second very narrow filter which energetically rejects the second local frequency and the image-frequency signal.

4 (currently amended) - Adapter according to ~~any one of Claims 1 to~~ Claim 3, ~~characterized in that~~ wherein the first and second very narrow filters are surface wave filters.

5 (currently amended) - Adapter according to ~~any one of Claims 1 to 4,~~ ~~characterized in that~~ Claim 4, wherein the frequency plan of the first to fifth various mixers ~~(406, 408, 412, 414, 416)~~ makes it possible to obtain by simple switching of the frequencies of the harmonics generator ~~(404)~~ and of the agile synthesizer and by a single change of the first and second surface wave filters ~~(423, 417)~~, four configurations for two distinct operators ~~(A, B)~~ compatible with a cable network.

6 (currently amended) - Radio-frequency transmission system comprising at least one base station ~~(ST)~~ and at least one subscriber device, the base station using a single oscillator to perform a down conversion of signals to the frequency band transmitted by radio and possibly an up conversion of signals from the frequency band received by radio, the subscriber device comprises an interior unit ~~(3)~~ and an exterior unit ~~(1)~~ which are linked by a cable ~~(2)~~, ~~characterized in that~~, wherein the exterior unit ~~(1)~~ comprises a VHF adapter comprising a first down conversion chain and a second up conversion chain, wherein the first chain comprises a first mixer followed by a second mixer and the second chain a third mixer followed by a fourth and by a fifth mixer, and wherein all the local frequencies necessary for these five mixers are obtained from a very stable single reference oscillator according to one of Claims 1 to 5.

7 - (new) Radio frequency transmission system according to claim 6, wherein the single reference oscillator of the adapter drives a harmonics generator inserted into a phase loop dielectric resonator oscillator using an SPD system to obtain on the one hand after multiplication by two a first local frequency energizing the first and fifth mixers, and on the other hand with a first very narrow filter a second local frequency for energizing the second and the third mixers.

8 - (new) Radio frequency transmission system according to claim 7, wherein the single reference oscillator furthermore drives an agile frequency synthesizer controlled by a bus so as to obtain variable frequencies for energizing the fourth mixer; and wherein a second very narrow filter is placed between the output of the third mixer and an input of the fourth mixer so that, the intermediate frequency for energizing the third mixer being a very low frequency pure frequency, the signal delivered by this third mixer can be filtered by the second very narrow filter which energetically rejects the second local frequency and the image-frequency signal.

9 – (new) Radio frequency transmission system according to claim 8, wherein the frequency plan of the first to fifth various mixers makes it possible to obtain by simple switching of the frequencies of the harmonics generator and of the agile synthesizer and by a single change of the first and second surface wave filters, four configurations for two distinct operators compatible with a cable network.